

Application No. 09/663,355
Docket No. 29250-000455/US

AMENDMENTS TO THE CLAIMS

The following is a complete listing of claims with status identifiers in parenthesis.

LISTING OF CLAIMS:

1. (Currently Amended) A communication method, comprising:
 - transmitting a first information on a single frequency carrier in accordance with a first multiframe structure having x frames, x being an integer;
 - transmitting a second information on said same single frequency carrier in accordance with a second multiframe structure having y frames, y being an integer different than $\pm x$;
 - arranging said first and second multiframe structures in time groups, each of said time groups having a plurality of timeslots; and
 - allocating a plurality of timeslots in each of said time groups to said first information and to said second information so that said first information and said second information are transmitted in time slots that are different from each other within each time group, and so that said first and second information are transmitted in different timeslots in each of said time groups.
2. (Previously Presented) The method of claim 1, wherein said first information includes broadcast control information.
3. (Previously Presented) The method of claim 1, wherein said first information includes common control information.

Application No. 09/663,355
Docket No. 29250-000455/US

4. (Previously Presented) The method of claim 1, wherein said first information includes broadcast control information and said second information includes common control information.

5. (Currently Amended) A communication method, comprising:
transmitting a first information on a single frequency carrier in accordance with a first multiframe structure having x frames, x being an integer;
transmitting a second information on said same single frequency carrier in accordance with a second multiframe structure having y frames, y being an integer different than x ; and
transmitting a third information on said same single frequency carrier in accordance with a third multiframe structure having z frames, z being an integer different than x and y ;
arranging said first, second and third multiframe structures in time groups, each of said time groups having a plurality of timeslots; and
allocating a plurality of timeslots in each of said time groups to said first information, said second information and said third information so that said first, second and third informations are transmitted in time slots different from each other within each time group.

6. (Currently Amended) The method of claim 1, wherein said first multiframe structure has 51 frames.

7. (Previously Presented) The method of claim 1, wherein said first multiframe structure has 52 frames.

Application No. 09/663,355
Docket No. 29250-000455/US

8. (Previously Presented) The method of claim 6, wherein
said second multiframe structure has 52 frames,
said first information included broadcast control information, and
said second information includes common control information.

9. (Previously Presented) The method of claim 1, wherein a base station of a wireless communication network performs said step of transmitting a first information and said step of transmitting a second information.

10. (Currently Amended) A communication method, comprising:
transmitting a first information on a single frequency carrier in accordance with a first multiframe structure having x frames, x being an integer;
transmitting a second information on said same single frequency carrier in accordance with a second multiframe structure having y frames, y being an integer different than x , wherein a current frame number for said second multiframe structure is derived from parameters that represent a current frame number for said first multiframe structure;
arranging said first and second multiframe structures in time groups, each of said time groups having a plurality of timeslots; and
allocating a plurality of timeslots in each of said time groups to said first information and to said second information so that said first information and said second information are transmitted in time slots that are different from each other within each time group.

Application No. 09/663,355
Docket No. 29250-000455/US

11. (Previously Presented) A communication system, comprising:

means for transmitting a first information on a single frequency carrier in accordance with a first multiframe structure having x frames, x being an integer;

means for transmitting a second information on said same single frequency carrier in accordance with a second multiframe structure having y frames, y being an integer different than x ;

arranging means for arranging said first and second multiframe structures in time groups, each of said time groups having a plurality of timeslots; and

allocating means for allocating a plurality of said timeslots to said first information and for allocating a plurality of said timeslots to said second information, so that said first information and said second information are transmitted in time slots that are different from each other within each time group, and so that said first and second information are transmitted in different timeslots in each of said time groups.

12. (Previously Presented) The system of claim 11, wherein said first information includes broadcast control information.

13. (Previously Presented) The system of claim 11, wherein said first information includes common control information.

14. (Previously Presented) The system of claim 11, wherein said first information includes broadcast control information, and

Application No. 09/663,355
Docket No. 29250-000455/US

said second information includes common control information.

15. (Currently Amended) A communication system, comprising:

means for transmitting a first information on a single frequency carrier in accordance with a first multiframe structure having x frames, x being an integer;

means for transmitting a second information on said same single frequency carrier in accordance with a second multiframe structure having y frames, y being an integer different than x ; and

means for transmitting a third information on said same single frequency carrier in accordance with a third multiframe structure having z frames, z being an integer different than x and y ;

means for arranging said first, second and third multiframe structures in time groups,
each of said time groups having a plurality of timeslots; and

means for allocating a plurality of timeslots in each of said time groups to said first
information, said second information and said third information so that said first, second and
third informations are transmitted in time slots that are different from each other within each
time group.

16. (Previously Presented) The system of claim 11, wherein said first multiframe structure has 51 frames.

17. (Previously Presented) The system of claim 11, wherein said first multiframe structure has 52 frames.

Application No. 09/663,355
Docket No. 29250-000455/US

18. (Previously Presented) The system of claim 16, wherein
said second multiframe structure has 52 frames,
said first information includes broadcast control information, and
said second information includes common control information.

19. (Previously Presented) The system of claim 16, wherein
said means for transmitting a first information and said means for transmitting a second
information are components of a base station of a wireless communication network.

20. (Previously Presented) The method of claim 1, wherein said allocating step prevents
said step of transmitting said first information from interfering with said step of transmitting said
second information within a same time group, and prevents transmission of any one of said first
information and said second information in one time group from interfering with transmission of
any one of said first information and said second information in each of the other time groups.

21. (Previously Presented) The method of claim 1, wherein said first and second
multiframe structures are time-grouped according to an edge-compact type network.

22. (Previously Presented) The system of claim 11, wherein said allocating step prevents
said step of transmitting said first information from interfering with said step of transmitting said
second information within a same time group, and prevents transmission of any one of said first
information and said second information in one time group from interfering with transmission of
any one of said first information and said second information in each of the other time groups.

Application No. 09/663,355
Docket No. 29250-000455/US

23. (Previously Presented) The system of claim 11, wherein said first and second multiframe structures are time-grouped according to an edge-compact type network.

24. (Currently Amended) A method for providing air interface channels in a communications network, comprising:

time multiplexing a plurality of different multiframe structures onto a single frequency carrier to accommodate different channel types defined by said plurality of different multiframe structures on the same single frequency carrier;

arranging said plurality of different multiframe structures in time groups, each of said time groups having a plurality of timeslots; and

allocating a plurality of timeslots in each of said time groups to said plurality of different multiframe structures so that said different multiframe structures are transmitted in timeslots that are different from each other within each time group,

wherein said time multiplexing includes time multiplexing a first multiframe structure of x consecutive frames, a second multiframe structure of y consecutive frames, and a third multiframe structure of z consecutive frames, x, y and z being different positive integers, with values of x, y and z selected so that a given frame number for the first, second and third multiframe structures simultaneously re-occurs every x*y*z frames.

25. (Canceled)

26. (Canceled)

Application No. 09/663,355
Docket No. 29250-000455/US

27. (Previously Presented) The method of claim 24, wherein said different channel types include common control channels, broadcast control channels and traffic channels.

28. (Currently Amended) The method of claim 2524, wherein said first multiframe structure of x consecutive frames is associated with one of common control channels, broadcast control channels and traffic channels.

29. (Currently Amended) The method of claim 2524, wherein said second multiframe structure of y consecutive frames is associated with one of common control channels, broadcast control channels and traffic channels.

30. (Currently Amended) The method of claim 2524, wherein said third multiframe structure of z consecutive frames is associated with one of common control channels, broadcast control channels and traffic channels.